Amendments to the Claims:

The following listing of claims will replace all prior versions and listing of claims in the application.

Please amend claims 67, 72-76, 80, 82, 85 and 86 as indicated below.

Please cancel claim 68 and 81 without prejudice or disclaimer to the subject matter claimed therein.

Listing of Claims:

1-66. (cancelled)

67. (currently amended): A method of treating hypertension in a [~~mammal~~] human in need of said treatment comprising administering an effective amount of a peptide comprising at least sixteen (16) contiguous amino [~~acids~~] acid residues selected from an amino acid sequence of a transmembrane domain of an alpha-1A adrenergic receptor selected from the group consisting of:

[~~GVGVGVFLAAFILMAVAGNLLVILSV (SEQ ID NO: 23);~~
~~FIVNLAVADLLLSATVLPFSATMEVL (SEQ ID NO: 24);~~
~~DVWAAVDVLCCTASILSLCTISV (SEQ ID NO: 25);~~
~~AAILALLWVVALVVSVGPLLGWKEP (SEQ ID NO: 26);~~
~~AGYAVFSSVCSFYLPMAVIVVMYC (SEQ ID NO: 27);~~
~~LAIVVGVFVLCWFPFFFVLPLGSL (SEQ ID NO: 28); and~~
~~EGVFKVIFWLGYFNSCVNPLIYPCS (SEQ ID NO: 29).~~]

IVNLAVADLLLTSTVLPFSAIFEV (SEQ ID NO: 64);
LMALLCVWALSLVISIGPLFGWRQ (SEQ ID NO: 65);
LGIVVGCFVLCWLPFFLVMPIGSF (SEQ ID NO: 66);
VFKIVFWLGYLNSCINPIIYPCS (SEQ ID NO: 67);
LLGVILGGLILFGVLGNILVILSV (SEQ ID NO: 68);
CNIWAAVDVLCCTASIMGLCIISIDRY (SEQ ID NO: 69); and
YVLFSALGSFYLPLAIILVMYC (SEQ ID NO: 70).

68. (cancelled)

69. (currently amended): The method according to claim 67 [~~or 68~~] wherein the peptide binds to a transmembrane domain of the alpha-1A adrenergic receptor.

70. (previously presented): The method according to claim 69 wherein the peptide inhibits the activity of the alpha-1A adrenergic receptor.

71. (previously presented): The method according to claim 70 wherein the inhibition of the activity of the alpha-1A adrenergic receptor induces vasodilation or inhibits vasoconstriction.

72. (currently amended): The method according to claim 67 [~~or 68~~] wherein the peptide retains a helical [~~confirmation~~] conformation.

73. (currently amended): The method according to claim 67 [~~or 68~~] wherein the peptide comprises up to twenty-six amino acid residues.

74. (currently amended): The method according to claim 67 [~~or 68~~] wherein one or more of the amino acid residues of the peptide contains a side chain modification.

75. (currently amended): The method according to claim 67 [~~or 68~~] wherein one or more of the amino acid residues of the peptide is a non-natural amino acid.

76. (currently amended): The method of claim 67 [~~or 68~~]wherein the peptide is altered to increase plasma half-life following administration.

77. (previously presented): The method of claim 76 wherein the peptide is conjugated to one or more water-soluble polymers.

78. (previously presented): The method of claim 76 wherein the peptide is incorporated into a polymeric matrix.

79. (cancelled).

80. (currently amended): The method according to claim 67 wherein the amino acid sequence of the peptide is [~~selected from the group consisting of:~~] VFKVIFWLGYFNSCVN (SEQ ID NO: 31).

81. (cancelled).

82. (currently amended): The method according to claim 67 [~~or 68 where in~~] wherein the peptide is administered in combination with a pharmaceutically acceptable carrier.

83. (previously presented): The method according to claim 82 wherein the pharmaceutically acceptable carrier enhances stability of the peptide.

84. (previously presented): The method according to claim 82 wherein the pharmaceutically acceptable carrier enhances adsorption of the peptide.

85. (currently amended): The method according to claim 67 [~~or 68~~] wherein the peptide is administered by a route selected from the group consisting of oral, nasal, buccal, intravenous, intramuscular, subcutaneous and transdermal.

86. (currently amended): A method of treating hypertension in a human in need of said treatment consisting essentially of administering an effective amount of a peptide comprising at least [~~nine~~] sixteen contiguous amino [~~acids~~] acid residues selected from an amino acid sequence of a transmembrane domain of [~~an~~] a human alpha-1A adrenergic receptor.